

AMENDMENTS IN THE CLAIMS

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1. (Currently Amended) A receiving device for a communication system, comprising:
a message information receiver for receiving information about a message to be received;
a transmission channel receiver for receiving the message;
a controller for determining an iterative decoding number according to the received message information received from the message information receiver; and
a decoder for iteratively decoding the received message received from the transmission channel according to the determined iterative decoding number.

2. (Original) The receiving device as claimed in claim 1, wherein the message information includes a class of received data.

3. (Original) The receiving device as claimed in claim 2, wherein the class includes a bit error rate (BER).

4. (Original) The receiving device as claimed in claim 3, wherein the controller increases the iterative decoding number if the BER is less than a predetermined number.

5. (Original) The receiving device as claimed in claim 2, wherein the class includes a permissible time delay.

6. (Original) The receiving device as claimed in claim 5, wherein the controller increases the iterative decoding number if the permissible time delay is greater than a predetermined number.

7. (Original) The receiving device as claimed in claim 1, wherein the message information includes a service type of the received data.

8. (Original) The receiving device as claimed in claim 7, wherein the controller decreases the iterative decoding number if the service type is a moving picture service.

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9. (Original) The receiving device as claimed in claim 1, wherein the decoder is a soft-decision decoder.

10. (Original) The receiving device as claimed in claim 1, wherein the decoder is a MAP (Maximum A Posteriori Probability) decoder.

11. (Original) The receiving device as claimed in claim 1, wherein the decoder is a SOVA (Soft Output Viterbi Algorithm) decoder.

12. (Previously Withdrawn) A receiving device for a communication system, comprising:
channel condition analyzing means for analyzing a condition of a receiving channel;
a controller for determining an iterative decoding number according to the channel condition; and

a decoder for iteratively decoding a received message according to the determined iterative decoding number.

13. (Previously Withdrawn) The receiving device as claimed in claim 12, wherein the controller increases the iterative decoding number if the condition of the receiving channel is determined to be worse than a predetermined condition.

14. (Previously Withdrawn) The receiving device as claimed in claim 12, wherein the decoder is a soft-decision decoder.

15. (Previously Withdrawn) The receiving device as claimed in claim 12, wherein the decoder is a MAP decoder.

16. (Previously Withdrawn) The receiving device as claimed in claim 12, wherein the decoder is a SOVA decoder.

Step 17
17. (Currently Amended) A receiving method for a communication system, comprising the steps of:

receiving information about a message to be received;

receiving the message through a channel;

determining an iterative decoding number according to the ~~received message~~ information; and

iteratively decoding the received message according to the determined iterative decoding number.

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18. (Original) The receiving method as claimed in claim 17, wherein the message information includes a data class of the received data.

19. (Original) The receiving method as claimed in claim 18, further comprising the step of decreasing the iterative decoding number if the data class of the received data is a low data class.

20. (Original) The receiving method as claimed in claim 18, wherein the class includes a BER.

21. (Original) The receiving method as claimed in claim 18, further comprising the step of decreasing the iterative decoding number if the BER is greater than a predetermined number.

22. (Original) The receiving method as claimed in claim 18, wherein the data class includes a permissible time delay.

23. (Original) The receiving method as claimed in claim 22, further comprising the step of decreasing the iterative decoding number if the permissible time delay is less than a predetermined number.

24. (Original) The receiving method as claimed in claim 17, wherein the message information includes a service type of the received data.

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25. (Original) The receiving method as claimed in claim 24, further comprising the step of decreasing the iterative decoding number if the service type is a moving picture service.

26. (Previously Withdrawn) A receiving method for a communication system, comprising the steps of:

analyzing a condition of a receiving channel;

determining an iterative decoding number according to the channel condition analysis; and

iteratively decoding a received message according to the determined iterative decoding number.

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27. (Previously Withdrawn) The receiving method as claimed in claim 26, wherein the channel condition is determined according to a signal-to-interference ratio (SIR) of a received signal.

28. (Previously Withdrawn) The receiving method as claimed in claim 27, further comprising the step of decreasing the iterative decoding number if the channel condition is worse than a predetermined condition threshold.

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